

Amendments to the Claims

1. (currently amended): An action group arbitration system, comprising:
 - a searchable memory search block having a first type memory portion and a second type memory portion, wherein the searchable memory search block is configured with a plurality of entries, the plurality of entries configured to provide a search result in response to a search key;
 - a first table having a plurality of stored values, wherein each of the plurality of stored values corresponds with one of the plurality of entries, and the first table configured to receive the search result and to provide a selection signal in response to the search result, the selection signal corresponding with at least one of the plurality of entries, wherein each of the plurality of entries includes having a first state and an associated stored value having an enable state; and
 - a second table configured to receive the selection signal and to provide an action indication in response to the selection signal.
2. (original): The action group arbitration system of claim 1, wherein:
 - the first type memory portion includes static random access memory (SRAM).
3. (original): The action group arbitration system of claim 1, wherein:
 - the second type memory portion includes ternary content addressable memory (TCAM).
4. (original): The action group arbitration system of claim 1, wherein:
 - the first and second type memory portions include a plurality of entries.
5. (original): The action group arbitration system of claim 4, wherein:
 - for each of the plurality of entries, an entry in the first table includes a plurality of the stored values.
6. (original): The action group arbitration system of claim 5, wherein:
 - each of the stored values corresponds to an action group.
7. (original): The action group arbitration system of claim 1, wherein:
 - the first state includes a hit or match indication.

8. (original): The action group arbitration system of claim 1, wherein:
the second table includes an action table having a plurality of portions.
9. (original): The action group arbitration system of claim 8, wherein:
each of the plurality of portions is configured to be accessed by a corresponding one of a plurality of the selection signals.
10. (original): The action group arbitration system of claim 9, wherein:
each of the plurality of portions corresponds to an action group.
11. (original): The action group arbitration system of claim 10, wherein:
the action group includes a user programmable register for enabling one or more categories of actions.
12. (original): The action group arbitration system of claim 1, wherein:
the selection signal is generated in response to a precedence determination.
13. (original): The action group arbitration system of claim 1, wherein:
the action indication includes an action to be performed on a packet.
14. (currently amended): A method of arbitrating actions, comprising the steps of:
performing a search operation on a searchable memory block;
accessing a stored action group number in a first table, the stored action group number
corresponding to each hit resulting from the search operation, the stored action group number
including a group subfield and a precedence number;
checking if the group subfields in the stored action group number ~~are~~ is enabled for any
hits from the search operation;
allowing the hit for a group if the group subfield is enabled;
suppressing the hit for the group if the group subfield is not enabled;
determining a precedence based on the precedence number to provide a search result for
the group; and

selecting an action based on the search result from an action table portion corresponding to the group.

15. (currently amended): The method of arbitrating actions of claim 14, wherein:

the performing the search operation includes searching a memory block having a first type memory portion and a second type memory portion.

16. (original): The method of arbitrating actions of claim 15, wherein:

the first type memory portion includes static random access memory (SRAM).

17. (original): The method of arbitrating actions of claim 15, wherein:

the second type memory portion includes ternary content addressable memory (TCAM).

18. (original): The method of arbitrating actions of claim 14, wherein:

the accessing the stored action group number includes selecting an entry from an action group number table.

19. (original): The method of arbitrating actions of claim 14, wherein:

the determining the precedence includes selecting a highest priority hit from among a remaining group of hits.

20. (original): The method of arbitrating actions of claim 14, wherein:

the action table includes a portion corresponding to each of the groups.

21. (original): The method of arbitrating actions of claim 20, wherein:

the selecting the action from the action table includes accessing the portion corresponding to the group.

22. (currently amended): A ~~means~~ computer program embodied on a computer-readable medium for arbitrating actions, comprising:

a means for performing a search operation on a searchable memory block;

a means for accessing a stored action group number in a first table, the stored action group number corresponding to each hit resulting from the search operation, the stored action group number including a group subfield and a precedence number;

a means for checking if the group subfields in the stored action group number ~~are~~ is enabled for any hits from the search operation;

a means for allowing the hit for a group if the group subfield is enabled;

a means for suppressing the hit for the group if the group subfield is not enabled;

a means for determining a precedence based on the precedence number to provide a search result for the group; and

a means for selecting an action based on the search result from an action table portion corresponding to the group.